

**REMARKS**

Applicants respectfully request reconsideration of the present application in view of the amendments and remarks included herein. Prior to entry of this response, claims 34-37, 40-45, and 51 were pending in the application, of which claims 34 and 51 are independent. In the Office Action dated May 21, 2007, claims 34-37 and 40-45 were rejected under 35 U.S.C. §112, second paragraph and claims 34-37, 40-45 and 51 were rejected under 35 U.S.C. § 103(a). Following this Amendment, claims 34-37, 40-45, and 51 remain pending in this application.

I. Rejection of the Claims Under 35 U.S.C. §112, Second Paragraph

The Examiner rejected claims 34-37 and 40-45 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicants regards as their invention. Specifically, the Examiner asserted that there is confusing antecedent basis for "the preform" at line 25 of claim 34, from which claims 35-37 and 40-45 depend. Applicants have amended the preamble of claim 34 to avoid any ambiguity regarding the antecedent basis for the term "preform" in claim 34, line 25, and respectfully request that the Examiner withdraw the §112 rejection of claims 34-37 and 40-45. Applicants respectfully assert that the amendment to the preamble of claim 34 does not change the scope of the claim as previously presented.

The Examiner also rejected claim 42 under §112, second paragraph, asserting that there is no antecedent basis for the term "the walls" as it appeared in claim 42 as previously presented. Claim 42 is amended herein to recite "said bottom portion comprises at least a lower portion tapered in the form of a substantially frusto-conical shaped nozzle that is angled from about 12° to about 16° with respect to the longitudinal

axis of the furnace.”<sup>1</sup> Applicants respectfully submit that the Examiner’s rejection of claim 42 is moot in view of this amendment and request that the rejection be withdrawn.

II. Rejection of the Claims Under 35 U.S.C. §103

The Examiner rejected claims 34-37, 40-45, and 51 as being obvious over U.S. Patent Publication No. 2002/0029591 (“Dickinson”), or U.S. Patent No. 5,284,499 (“Harvey”), in view of Japanese Patent Publication No. 08091862 (“Kazuya”), U.S. Patent No. 5,160,359 (“Strackenbrock”), and U.S. Patent No. 4,547,644 (“Bair”), and optionally in view of U.S. Patent No. 4,988,374 (“Harding”) and U.S. Patent No. 4,030,901 (“Kaiser”). The Examiner also rejected claims 34-37 and 40-45 over Dickinson (or Harvey) in view of Kazuya, Bair, and U.S. Patent No. 4,678,490 (“Miller”), and optionally in view of Harding and Kaiser.

Independent claim 34 recites, among other things, a “support collar adapted to slide the optical preform horizontally during operation of the drawing furnace.” The Examiner has asserted that both Harding and Kaiser disclose this recitation.<sup>2</sup> Applicants respectfully disagree. With regard to Harding, the Examiner has deemed that holding chuck 7 “can slide, when it is not connected to any other structure,” and therefore meets the above-quoted recitation of claim 34. Apr. 6<sup>th</sup> OA at 7. However, nowhere does Harding disclose that holding chuck 7 is adapted to slide the preform horizontally during operation of the furnace. Indeed, Harding is silent regarding

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<sup>1</sup> Support for this amendment is found in the specification at least at page 35, lines 6-22.

<sup>2</sup> In the May 21<sup>st</sup> Office Action, the Examiner stated that the references relied on for the § 103 rejections are applied in the same manner as the previous office action, which in turn referred back to the April 6, 2006 Office Action.

horizontal movement of sliding chuck 7. Applicants respectfully contend that a person of ordinary skill in the art could not reasonably infer from Harding's silence that Harding's holding chuck 7 is adapted to slide a preform horizontally during operation of the furnace. Accordingly, Harding does not teach or suggest a "support collar adapted to slide the optical preform horizontally during operation of the drawing furnace" as recited in claim 34.

Furthermore, Harding does not indicate, as the Examiner suggests, that holding chuck 7 is not connected to any other structure. Drawings should be evaluated for what they reasonably disclose and suggest to one of ordinary skill in the art, including any description of the articles pictured. MPEP 2125. As discussed in Applicants' April 13, 2007 Amendment, although Harding's figure does not show the structure to which holding chuck 7 is connected, Harding discloses that holding chuck 7 "gradually advances the preform into the furnace through the furnace entrance 8." Harding at 2:56-58. One of ordinary skill in the art would understand that holding chuck 7 must be connected to some structure which controls its "gradual[] advance" through the furnace. Harding at 2:56-58.

In the May 21<sup>st</sup> Office Action, the Examiner responded to a similar argument by Applicants by stating that "Examiner sees nothing which shows that Harding is unoperable without the structure being connected." That observation, however, is not a proper basis for finding that Harding discloses a "support collar adapted to slide the optical preform horizontally during operation of the drawing furnace." The issue is what the prior art would have reasonably taught one of ordinary skill in the art. It would be unreasonable for one of ordinary skill in the art to conclude that holding chuck 7 is not

connected to any structure because Harding discloses no manner in which holding chuck 7 could gradually advance into the furnace without being connected to additional structure, and one of ordinary skill in the art would understand that holding chuck 7, if not connected to other structure, would simply fall through the furnace. Instead, one of ordinary skill in the art would understand that holding chuck 7 is attached to some structure, such as a motor, controlling its gradual advancement into the furnace. Accordingly, Harding's disclosure does not support the Examiner's assertion that it discloses a "support collar adapted to slide the optical preform horizontally during operation of the drawing furnace."

The Examiner has also asserted that Kaiser's rubber ring 27 satisfies claim 34's recitation of a support collar "adopted to horizontally slide an optical preform during operation of the drawing furnace." However, nowhere does Kaiser teach or suggest that rubber ring 27 can slide a preform horizontally during operation of a furnace. Furthermore, nothing in Kaiser would lead one of ordinary skill in the art to infer that rubber ring 27 can slide a preform horizontally during operation of a furnace. To the contrary, Kaiser discloses that rubber ring 27 seals the furnace entrance. Kaiser at 4:19-21. If anything, this would lead one of ordinary skill in the art to conclude that moving rubber ring 27 would break the seal with the furnace. In the May 21<sup>st</sup> Office Action, the Examiner disagreed with Applicants' argument that modifying Kaiser's disclosure such that rubber ring 27 was adapted to horizontally slide a preform during furnace operation would render it unsuitable for its purpose of sealing the furnace, but provided no indication of why one of ordinary skill in the art would understand Kaiser to indicate that rubber ring 27 was adapted to horizontally slide a preform during furnace

operation. Because nothing in Kaiser would prompt one of ordinary skill in the art to infer that rubber ring 27 is adapted to horizontally slide a preform during furnace operation, the Examiner has not established that Kaiser teaches this recitation of claim 34.

The Examiner also asserted in the May 21<sup>st</sup> Office Action that “adjustability (in this case sliding) is generally not a patentable improvement” (OA at 4), relying on *In re Stevens*, 212 F.2d 197 (CCPA 1954). *Stevens* involved a claim reciting a fishing rod having an adjustable finger hook. The CCPA held that the claim was properly rejected over the combination of a reference teaching a fishing rod with an adjustable finger hook and references teaching the remaining claim limitations. *Stevens*, 212 F.2d at 198. Thus, in *Stevens*, each feature of the rejected claim was disclosed in references cited by the Examiner. As discussed above, the Examiner has cited no art disclosing a “support collar adapted to slide the optical preform horizontally during operation of the drawing furnace.” Accordingly, *Stevens* does not support the rejection of claim 34 over the cited combination.

The Examiner also cited *KSR Int’l Co. v. Teleflex, Inc.*, 04-1350 (2007) for the proposition that

When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense. In that instance, the fact that a combination was obvious to try might show that it was obvious under §103.”

As the cited passage indicates, *KSR* relates to the motivation to combine known elements in the art. As discussed above, however, the Examiner has cited no art

showing a support collar as recited in claim 34. Thus, lacking any combination showing all of the recited features, the question of motivation to combine is not reached.

Furthermore, applying this passage to claim 34 assumes that there was a recognized design need or market pressure to provide a support collar adapted to horizontally slide an optical preform during furnace operation. The Examiner has cited no evidence that this was the case. Accordingly, the passage from *KSR* cited by the Examiner does not support the rejection of claim 34.

Because none of the references cited by the Examiner teaches or suggests at least a "support collar adapted to horizontally slide a preform during operation of the drawing furnace," a *prima facie* case of obviousness has not been established with respect to claim 34. Applicants therefore respectfully request that the rejection of claim 34 be withdrawn, as well as the rejection of claims 35-37 and 40-45, each of which depend from claim 34.

The May 21<sup>st</sup> Office Action also indicates that the Examiner rejected claim 51 under §103 as being obvious over Dickinson or Harvey, in view of Kazuya, Strackenbrock, and Bair, and optionally in view of Harding and Kaiser. The Examiner did not explain how these references purportedly teach or suggest each recitation of claim 51, but instead stated that the references are applied in the same manner as the previous office action. OA at 3. However, claim 51 was not rejected under §103 in the previous office action (or any previous office action). Instead, the sole rejection of claim 51 in the November 20, 2006 Office Action was made under 35 U.S.C. §112, first paragraph. This rejection was overcome by the amendment to claim 51 presented in

Applicants' April 13<sup>th</sup> Amendment, and the §112 rejection was withdrawn in the May 21<sup>st</sup> Office Action.

Claim 51 recites, among other things,

a distributor body having a substantially annular distribution chamber, a distribution ring, and an outlet in fluid communication with an interior of the muffle, the distributor body configured to receive conditioning gas substantially tangentially with respect to the substantially annular distribution chamber, the distribution ring being adapted to uniformly introduce and forcedly direct a first portion of the conditioning gas into the muffle in a downward direction towards said furnace body and to direct a second portion of the conditioning gas to an upper portion of the substantially annular distribution chamber to create a buffer of conditioning gas having a pressure higher than a pressure outside the drawing furnace.

Because the cited references do not disclose at least this recitation of claim 51, a *prima facie* case of obviousness has not been established, and Applicants respectfully request that the Examiner withdraw the rejection of claim 51.

III. Conclusion

In view of the foregoing remarks and amendments, Applicants respectfully request reconsideration of this application and the timely allowance of the pending claims. The preceding arguments are based only on the arguments in the Office Action, and therefore do not address patentable aspects of the invention that were not addressed by the Examiner in the Office Action. The claims may include other elements that are not shown, taught, or suggested by the cited art. Accordingly, the preceding argument in favor of patentability is advanced without prejudice to other bases of patentability.


If there are any fees due in connection with the filing of this Response, please charge the fees to our Deposit Account No. 06-0916. If a fee is required for an

extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should be charged to our deposit account.

Respectfully submitted,

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